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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,645	08/05/2003	Jianzhou Wu	0425-1067P	5831
2292 7590 01/09/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER FELTON, AILEEN BAKER	
			ART UNIT 1793	PAPER NUMBER
			NOTIFICATION DATE 01/09/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/633,645	<b>Applicant(s)</b> WU ET AL.	
	<b>Examiner</b> Aileen B. Felton	<b>Art Unit</b> 1793	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7-31 is/are pending in the application.
- 4a) Of the above claim(s) 5, 11-13, 16, 17, 19-22, 24 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-10, 14, 15, 18, 23, 25, 26 and 28-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. Claims 1-4, 8-10, 23, 25-26, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeuner (6,132,537).

Zeuner discloses gas generating composition for an air bag that comprises a fuel from 20-60 % of melamine, cyanuric acid and their salts and derivatives, an oxidizer such as basic copper nitrate from 10-50 %, and metal oxides (col. 2, lines 1-20 and 53-56, and claim 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use melamine cyanurate since Zeuner discloses that melamine and cyanuric acid and their salts can be used and since melamine cyanurate is a salt of melamine and cyanuric acid.

2. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeuner (6,132,537) as applied above, in view of Zhou (6,468,369) or Matsuda (5,780,767).

The composition also includes typical processing aids but not the specific binder.

Both Zhou and Matsuda teach the use of sodium carboxymethylcellulose in col. 4, lines 25-35 and col. 3, lines 4-6, respectively.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the sodium carboxymethylcellulose taught by Zhou or

Matsuda into the composition of Zeuner since both Zhou and Matsuda disclose that it is a known binder for gas generating compositions.

3. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zeuner (6,132,537) in view of Zhou (6,468,369) or Matsuda (5,780,767) as applied above, and further in view of Hinshaw et al (5,970,703).

Hinshaw et al teaches the use of aluminum hydroxide as a coolant in a gas generating composition.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the coolant as taught by Hinshaw with the composition disclosed by Zeuner, Zhou, and Matsuda since Hinshaw suggests that it is useful as an additive for gas generating compositions.

4. Claims 1-4, 7-10, 23, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheffee et al (5,861,571).

Scheffee discloses a composition with a melamine and cyanuric acid derivative, cellulose binders, hydroxides (col. 4) and ammonium perchlorate (col. 3). The amounts are shown in col. 2 and col. 4 as well as in the Table.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use melamine cyanurate since Scheffee discloses that melamine and cyanuric acid and their derivatives can be used and since melamine cyanurate is a derivative of melamine and cyanuric acid.

Art Unit: 1793

5. Claims 14, 18, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheffee et al (5,861,571) as applied above, and further in view of Taylor et al (6,096,147) and Hinshaw et al (5,970,703)

Taylor teaches the known use of basic copper nitrate in a gas generating composition with a carboxymethylcellulose binder (col. 5, lines 1-30).

Hinshaw et al teaches the use of aluminum hydroxide as a coolant in a gas generating composition.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the coolant as taught by Hinshaw with the composition disclosed by Scheffee since Hinshaw suggests that it is useful as an additive for gas generating compositions. It is also obvious to use the basic copper nitrate as taught by Taylor since it is prima facie obvious to combine two compositions, each taught for the same purpose to yield a third composition for that very purpose. *In re Kerkhoven*, 205 USPQ 1069, *In re Pinten*, 173 USPQ 801, and *In re Susi*, 169 USPQ 423.

### ***Response to Arguments***

6. Applicant's arguments have been fully considered but they are not persuasive. Applicants arguments regarding Zeuner and Scheffee are not persuasive as both disclose melamine and cyanuric acid with their salts and derivatives, thus it would be obvious to use melamine cyanurate.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aileen B. Felton whose telephone number is

571.272.6875. The examiner can normally be reached on Monday-Friday 6:30-4:00, except alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571.272.1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aileen Felton/  
Primary Examiner  
Art Unit 1793

Application/Control Number: 10/633,645

Page 6

Art Unit: 1793